

DRAIN HULK[®]

PE/PP MANHOLE & INSPECTION CHAMBER

PRODUCT CATALOGUE



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**1st TO
INTRODUCE
CPVC
IN INDIA**

**1st TO
INTRODUCE
UPVC LEAD
FREE PIPES
IN INDIA**

**1st TO
INTRODUCE
LOW NOISE
PP DRAINAGE
PIPES IN INDIA**

**1st TO
INTRODUCE
FOAMED PVC
DRAINAGE
PIPES IN INDIA**



**1st TO
INTRODUCE
LEAD FREE
COLUMN PIPES
IN INDIA**

**1st TO
INTRODUCE
POLYMER BASED
INDUSTRIAL
PIPING SYSTEM
IN INDIA**

**1st TO
INTRODUCE
NSF APPROVED
SOLVENT
CEMENT
IN INDIA**

**1st TO
INTRODUCE
CPVC PIPING FOR
AUTOMATIC
FIRE SPRINKLER
SYSTEM IN INDIA**

ASTRAL, INDIA'S PROGRESSIVE BUILDING MATERIALS COMPANY

Established in 1996 with the aim to manufacture best-in-globe plastic piping systems, Astral Pipes fulfils emerging piping needs of millions of houses and adds extra mileage to India's developing real estate fraternity with the hallmark of unbeaten quality and innovative piping solutions. Keeping itself ahead of the technology curve, Astral has always been a front runner in the piping category by bringing innovation and getting rid of old, primitive and ineffective plumbing methods. Bringing CPVC in India, and pioneering in this technology, have set Astral apart and its highest quality enabled it to obtain NSF approval for its CPVC pipes and fittings. Astral went beyond the category codes by launching many industry firsts, like launching India's first lead-free uPVC pipes for plumbing as well as for stream water, just to name a few.

Astral Pipes offers the widest product range across this category when it comes to product applications. Astral Pipes is equipped with production facilities at Santej and Dholka in Gujarat, Hosur in Tamil Nadu, Ghiloth in Rajasthan, Sangli & Aurangabad in Maharashtra, Cuttack in Odisha and Sitarganj in Uttarakhand to manufacture plumbing systems, drainage systems, agriculture systems, fire sprinkler piping systems, industrial piping and electrical conduit pipes with all kinds of necessary fittings.

Astral Pipes' Infrastructure division offers a comprehensive product range including corrugated piping for drainage and cables, polyolefin cable channels, sewage treatment plants, plastic sheathing ducts, suction hoses, and sub-surface drainage systems. This range helps Astral to establish a strong foothold in infrastructure and agriculture sector in the constantly evolving business of piping.

In 2014, Astral forayed into the adhesives category by acquiring UK-based Seal It Services Ltd. and Kanpur based Resinova Chemie Ltd., which manufacture adhesives, sealants and construction chemicals. With five manufacturing facilities now in this business segment, Astral has strengthened its presence in the category and made rapid inroads.

In the year 2020, Astral has expanded its product portfolio and entered into the Water Tanks Segment. The water tank segment is an expanded domain of plumbing and water supply with a huge nationwide potential. Astral Pipes manufactures water tanks from its Santej, Aurangabad, Cuttack, Hosur & Ghiloth manufacturing facilities. A wide range of water storage tanks has helped Astral to become a versatile player in the industry.

Extending the product portfolio further, in the year 2022 Astral forayed into the categories of Faucets and Sanitary-ware, followed by acquisition of Bangalore based Gem Paints to enter in the Paints category. This expansion will help Astral march firmly towards becoming a holistic building materials company.

ADHESIVES

- EPOXY ADHESIVES & PUTTY
- SILICONE SEALANTS
- CONSTRUCTION CHEMICALS
- PVA
- CYANOACRYLATE
- SOLVENT CEMENTS
- TAPES
- POLYMERIC FILLING COMPOUND
- ANAEROBIC ADHESIVES
- INDUSTRIAL ADHESIVES
- INSTANT HAND SANITIZER
- SURFACE CLEANING PRODUCTS

PIPING

- PLUMBING PIPES & FITTINGS
- CPVC, PVC & PEX
- SEWERAGE DRAINAGE PIPES & FITTINGS
- AGRICULTURE PIPES & FITTINGS
- INDUSTRIAL PIPES & FITTINGS
- FIRE SPRINKLERS PIPES & FITTINGS
- CONDUIT & CABLE PROTECTION
- ANCILLARY PRODUCTS
- URBAN INFRASTRUCTURE
- DUCTING

WATER TANKS

PAINTS

FAUCETS

SANITARYWARE





INNOVATION & RECOGNITIONS

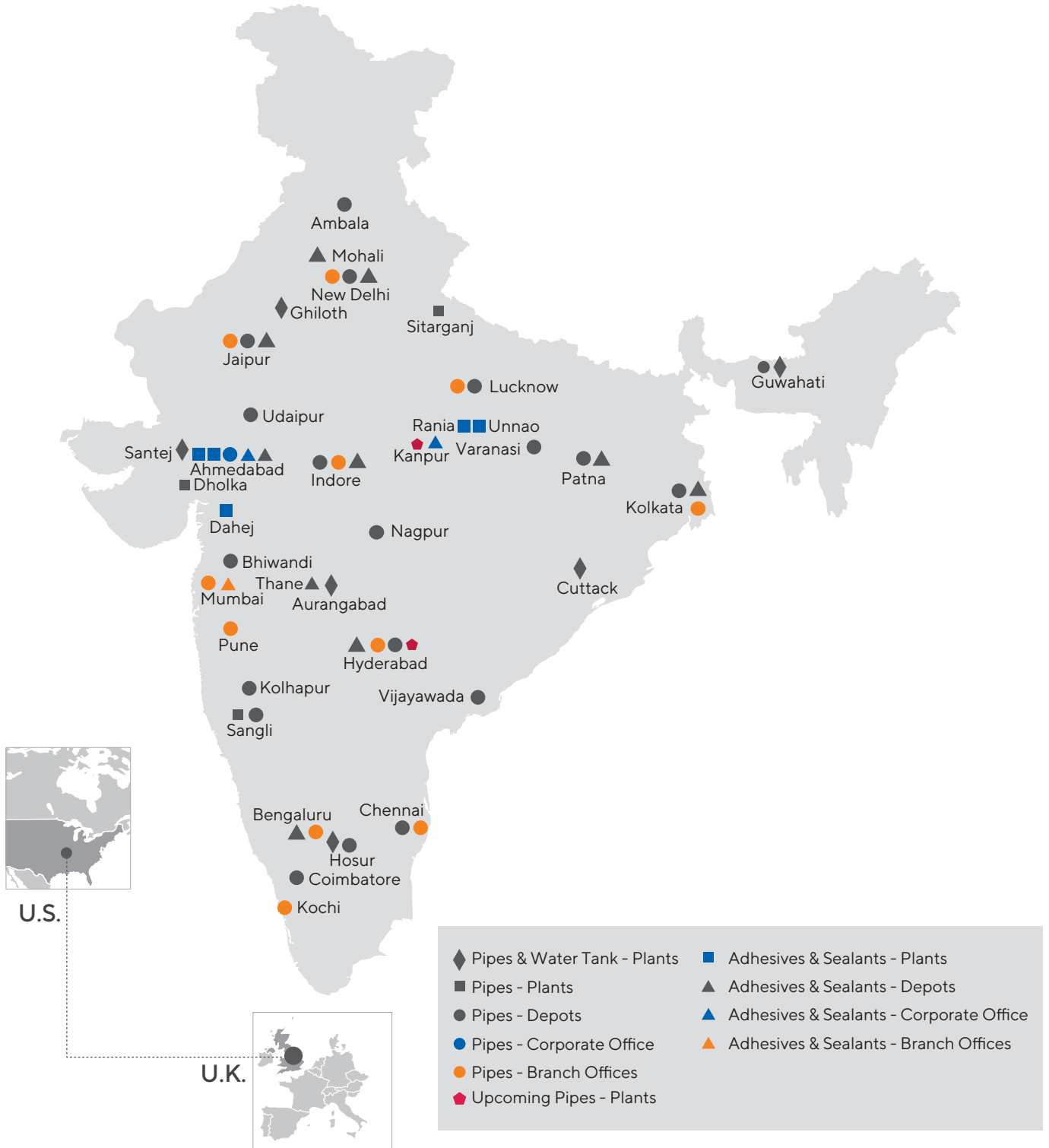
- First to introduce CPVC piping system in India (1999)
- First to launch lead free uPVC piping system in India (2004)
- Corp Excel- National SME Excellence Award (2006)
- First to get NSF Certification for CPVC piping system in India (2007)
- First to launch lead-free uPVC column pipes in India (2012)
- Enterprising Entrepreneur of the year (2012-13)
- Business Standard Star SME of the year (2013)
- Inc. India Innovative 100 for Smart Innovation under category of 'Technology' (2013)
- India's Most Promising Brand Award (2014)
- Value Creator Award during the first ever Fortune India Next 500 (2015)
- India's Most Trusted Pipe Brand Award (2016, 2019, 2020 & 2022)
- ET Inspiring Business Leaders of India Award (2016)
- India's Most Attractive Pipe Brand Award (2016)
- Fortune India 500 Company (2016)
- India's Most Desired Pipe Brand Award (2022)
- Consumer Validated Superbrands India (2017, 2019 & 2021-2022)



MARKETING NETWORK

Astral has a marketing network of more than 800 distributors and 30,000 dealers spread all over India with branch offices at Mumbai, Pune, Delhi, Bengaluru, Chennai, Hyderabad, Jaipur, Lucknow and Kochi. Apart from that Astral has its own warehouses at Vijaywada, Hyderabad, Delhi, Kolhapur, Kolkata, Nagpur, Indore, Patna, Varanasi,

Jaipur, Hosur & Guwahati to deliver the material as quick as possible. More than 400 techno marketing professionals and administrative personnel are on the board to coordinate with architects, plumbing contractors and plumbers to utilize the best plumbing techniques and to get the best from the products.



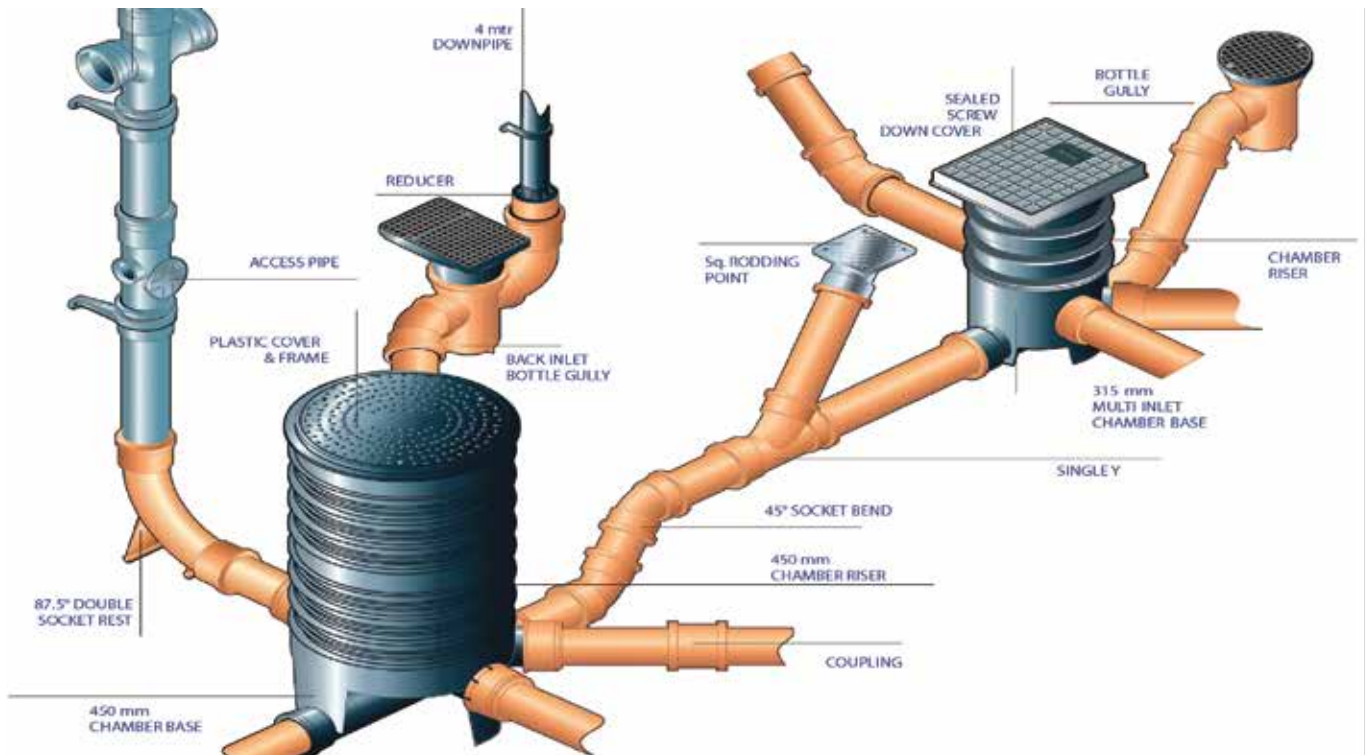
ASTRAL DRAIN HULK

ABOUT **ASTRAL DRAIN[®] HULK**

Astral's Drain Hulk is a superior underground drainage system that seamlessly connects your SWR system to main drains, public sewers, or sewage treatment plants. This comprehensive solution is designed for building drainage and sewerage applications, catering to highly sophisticated requirements. The Drain Hulk system offers multiple advantages over traditional drainage products. Astral's manhole and inspection chambers, made from 100% virgin UV-stabilized polyethylene (PE) or polypropylene (PP), are intended for use in underground drainage and sewerage systems. These chambers feature an innovative industrial-strength design based on nearly 20 years of German and European experience, incorporating carefully designed ribs for extra strength and uplift prevention against groundwater.



ASTRAL INSPECTION CHAMBERS



Astral chambers are suitable for both on-road and off-road installations. Manhole and inspection chambers are essential components of any sewerage pipeline, particularly where there are changes in direction, diameter, or significant gradients. These chambers are required in domestic, commercial, and municipal sewerage networks.

The Astral Drain Hulk system is used for sewerage applications and stormwater collection and disposal. It provides a complete solution for underground drainage, eliminating concerns about pollution of groundwater, soil contamination, or negative effects on building foundations. Installation of this system is simple and fast, thanks to the choice of high-quality raw materials, structural accuracy, and strict quality control, which ensure a high degree of reliability.

Astral's inspection chambers and manholes are designed to offer easier and more economical alternatives to traditional construction methods. The Ø315 mm, Ø355 mm, and Ø450 mm chambers are made of tough PolyPropylene (PP), are impact-resistant, and simple to install. The Ø500 mm and Ø600 mm chambers are available in PE material, while the Ø800 mm and Ø1000 mm manholes are also made from PE material.

The chamber raising pieces are designed for simple dry joining, providing an instant watertight joint. These pieces feature strengthening ribs and webbing and can be easily built up to the required height between the chamber base and cover. Astral inspection chambers comply with all current regulations and are designed with a built-in fall for optimal flow performance.

APPLICATIONS

- RESIDENTIAL
- MULTI-FLOOR BUILDINGS & RESIDENTIAL COMPLEX
- HOTELS & RESORTS
- HOSPITALS
- SHOPPING MALLS
- ACADEMIC INSTITUTES
- MUNICIPAL SEWREAGE SYSTEM

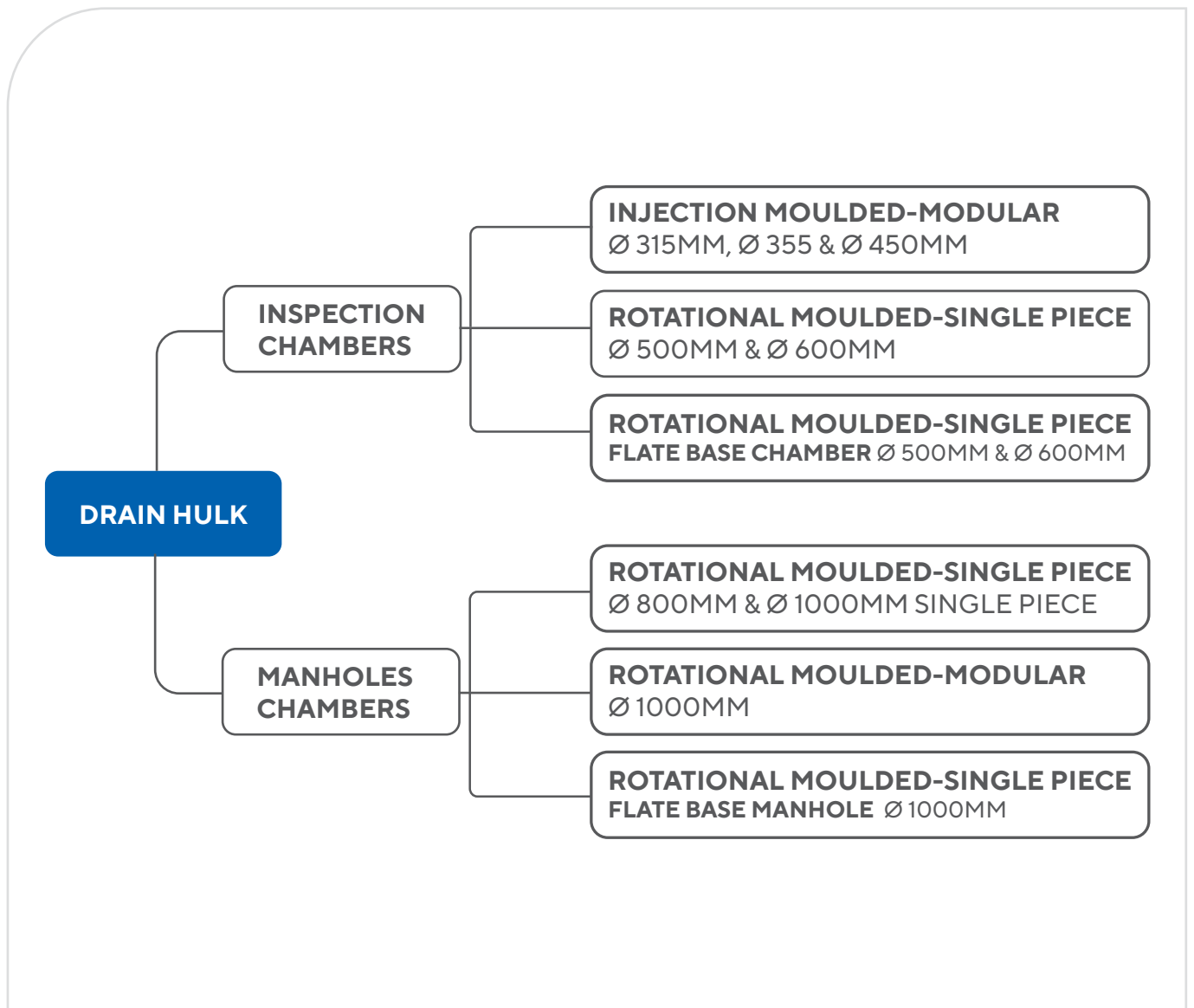
AVAILABLE SIZE*

INSPECTION CHAMBER

315 mm, 355 mm, 450 mm, 500 mm ,600 mm

MAN HOLE

800 mm & 1000 mm Single Piece & Modular (Base Unit+ Riser Unit + Upper Unit)



KEY PROPERTIES AND BENEFITS



GREAT FLEXIBILITY

Due to availability of ready made inspection chambers, long lengths of lighter weight pipes and different components, installation of this system is very convenient and fast.



HYGIENIC AND SAFE

Trouble free performance of the joints without blockage and leakage ensures high standards of hygiene.



PERFECT HYDRAULIC PROPERTIES

The chambers are designed with in built slope which increases the hydraulic capabilities of the system.



MINIMUM EXCAVATION COST

Because of simple joining technique, trench width can be kept minimum and smoother bore of the pipe allow high flow rates at relatively flatter gradients.



WATERTIGHT SYSTEM

Pipe, riser or shaft connection with the chamber base is absolutely watertight and unique. Design of pipe joints with click ring and sealing ring makes the system completely leak proof.



MAINTENANCE FREE

Optimum functional qualities and good hydraulic properties & smooth surface finish play an important part in reducing the need for jetting and other forms of maintenance, and therefore operational costs are considerably reduced.



GREAT STRENGTH & DURABLE

System is sufficiently durable to meet site loading requirements.



LONGER LIFE AND OVERALL ECONOMY

It Is Due To Superior Chemical Resistance, Sufficiently Durable, And Offers Long Service Life And Trouble Free Operation.

INSPECTION CHAMBER

Ø315 MM, Ø355 MM



Astral's innovative design for 315 mm and 355 mm brings unmatched flexibility to the underground drainage market. The joints & seals are designed in such a way that they can accommodate the movement of connecting piece up to 3° in any direction. This is of great assistance to the installer where the connecting pipes are not perfectly aligned with

the chamber inlets. In many instances it will eliminate the need to install an extra bend and provide a saving on the cost of the installation. In summary, the Inspection Chamber design and flexibility provides a practical, innovative and cost effective solution for the provision of access in a drainage system.

CONFIGURATION

AVAILABLE IN Ø315 MM & Ø355 MM

VARIOUS TYPE OF CHAMBER BASES

 <p>CHAMBER LH TEE JUNCTION BODY</p> <p>CHAMBER LH TEE JUNCTION BASE</p>	 <p>CHAMBER RH 90° BEND BASE</p>
 <p>CHAMBER RH TEE JUNCTION BODY</p> <p>CHAMBER RH TEE JUNCTION BASE</p>	 <p>CHAMBER BASE 90° BEND (SAME INVERT)</p>
 <p>CHAMBER TWO 90° INLET JUNCTION BODY</p> <p>CHAMBER TWO 90° INLET JUNCTION BASE</p>	 <p>CHAMBER STRAIGHT BASE</p>
 <p>CHAMBER LH 90° BEND BODY</p> <p>CHAMBER LH 90° BEND BASE</p>	 <p>CROSS TEE INLET JUNCTION BASE</p>
 <p>MULIPLE INLET BASE*</p>	 <p>MULIPLE INLET BASE*</p>

AVAILABLE IN 315 MM ONLY*

INSPECTION CHAMBER ASSEMBLY

Ø315 & Ø355 MM

- Connect the pipes with rubber lubricants to the inlet and outlet of chambers and level the chamber.
- Fix the no. of riser on base as per invert level
- Backfill the pit with granular material with 150 mm width all around. Properly compact the backfill material, in 6"-10" layer. If needed watering can be used.
- 6" PCC / RCC collar at the top is recommended for heavy traffic loads. The frame should be properly embedded in the concrete and then the cover should be placed on it.

Note: Heavy Traffic load not possible in Ø315 & Ø355mm Chamber.



1 CHAMBER BASE



2 FIX RISER ON CHAMBER BASE



3 RISER WITH CHAMBER BASE



4 FIX ANOTHER RISER ON CHAMBER BASE



5 FIX RUBBER RING ON FRAME



6 FIX FRAME



7 PUT COVER ON IT



8 PUT LID ON IT TIGHTEN WITH SCREW



9 FIX PIPE IN INLET (*Drainmaster, foamcore, d-rex pipe)

Astral 315 mm chamber is to be used with three risers. Depth are as shown in the chart below.

315 mm Chamber	Height (mm)
Only Body	240
With One Riser	375
With Two Risers	515
With Three Risers	650
Frame+cover height	100

Astral 355 mm chamber is to be used with three risers. Depth are as shown in the chart below.

355 mm Chamber	Height (mm)
Only Body	310
With One Riser	435
With Two Risers	575
With Three Risers	710
Frame+cover height	100

INSPECTION CHAMBER

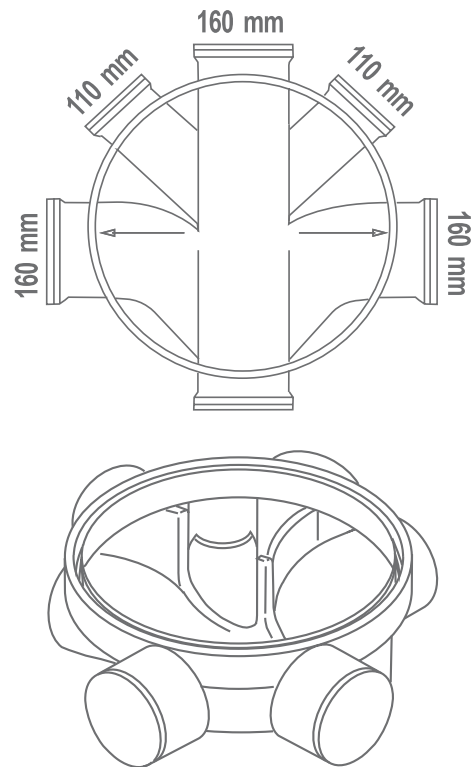
Ø450 MM



Astral's product innovation is again demonstrated with the introduction of a new 450 mm. diameter large inspection chamber. Significant research and development has gone into the design of this unique product. The Chamber base incorporates Three Nos. - 160 mm & Two Nos. - 110 mm

inlets with mainthrough of 160 mm. Also 160 mm inlets can be converted to all 110 mm inlets with reducer which allows 3° of movement in any direction. The plastic cover and frame can take loadings up to a maximum of 1.5tons wheel load.

450 MM INSPECTION CHAMBER SYSTEM



Astral 450 mm is chamber to be used with four risers. Depth are as shown in the chart below.

450 mm Chamber	Height (mm)
Only Body	405
With One Riser	575
With Two Risers	735
With Three Risers	900
With Four Risers	1065
Frame+cover height	40

INVERT DEPTH = BASE + RAISER (ELEVATION UNIT) + FRAME



INSPECTION CHAMBER ASSEMBLY

Ø450 MM

- Base units are supplied with lubricated blanking plugs. These may be pushed out on site when required and used to secure unused inlets.
- When making joints, the pipe spigot must be well chamfered, de-burred, cleaned and lubricated using Astral's lubricant.
- The pipe is then pushed into the socket allowing a clearing for subsequent expansion i.e., pipes should be pushed home fully and then withdrawn by 10 mm.
- Depending on the depth of invert required, use combination of the chamber base and risers. The riser can be cut for the intermediate depth. Use rubber seal ring between chamber base and riser for 450 mm chamber

For subsequent risers, rubber rings are not required. If the chamber is to be installed in ground where the water level may rise above the invert level of the chamber, the chamber must be bedded on and surrounded by concrete.



1 CHAMBER BASE



2 FIX RUBBER RING ON RISER



3 FIX RISER WITH CHAMBER BASE



4 FIX ANOTHER RISER ON CHAMBER BASE



5 FIX LID ON ASSEMBLY



6 TIGHT LID WITH SCREW



7 PUT COVER ON IT



8 TIGHTEN WITH SCREW



9 FIX PIPE IN INLET (*Drainmaster, foamcore, d-rex pipe)

ASTRAL INSPECTION CHAMBERS

INSTALLATION GUIDELINE

Installation of the chambers is to be done with the standard practice and as per requirement of local authorities. General installation figures are provided herewith for different type of installation mainly based on traffic loads which are going to affect on system. Fig. 1 is for installation

of 450mm chamber base with durable polypropylene cover and frame having wheel load up to 1.5 tonnes. Suits pedestrian areas / domestic driveways. Fig. 2 is for installation of 450 mm chamber base with RCC cover and frame. Fig. 3 is for installation of 315 mm chamber base.

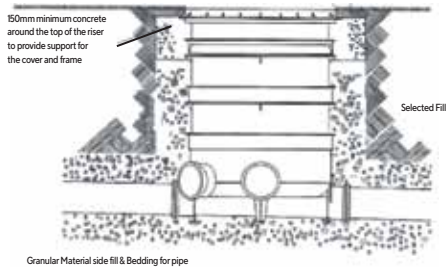


FIG. 1

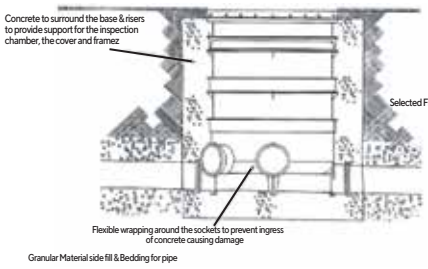


FIG. 2

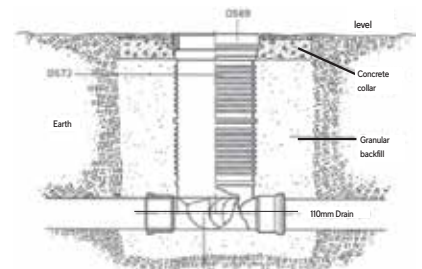


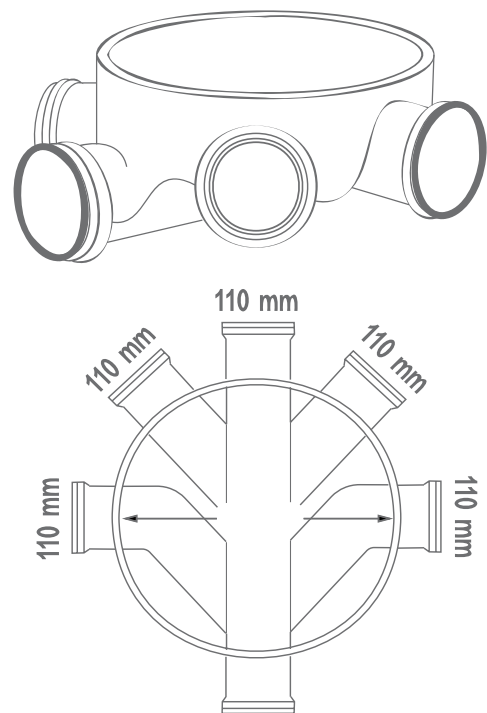
FIG. 3

Installation of the chambers is to be done with the standard practice and as per requirement of local authorities.

Installation as per load class requirements General installation figures are provided herewith for different type of installation mainly based on traffic loads which are going to impose on system. Fig. 1 is for installation of 450mm chamber base with durable polypropylene cover and frame having wheel load up to 1.5 tons. Suits pedestrian areas / domestic driveways. Fig. 2 is for installation of 450 mm chamber base with RCC cover and frame having load class up to 20 tons. Suits heavy traffic loads. Fig. 3 is for installation of 315 mm chamber base.

- The chamber base should be bedded with suitable granular material or single size aggregates having no sharp edges on 100 mm bed thickness for light traffic load conditions. For heavy traffic load conditions Fig.2 section has to be followed.

- When Astral PP cover and frame is used, the cover and frame is to be supported on a concrete base while the chamber is surrounded by granular backfill 150mm wide as recommended. When RCC or other cover is used, the chamber should be fully supported in concrete surround.



AVAILABLE IN 315 MM ONLY*

ASTRAL MANHOLE

INSTALLATION GUIDELINE

Important: Consult Astral for installations where water level is high. All instructions from the engineer and local regulations must be respected. Following is an overview of installation procedure, please consult Astral for detailed instructions. Rock sand or non-cohesive selected material of size less than 16mm without any sharp objects/rocks should be used as back filling material.

FAST, EASY AND SAFE INSTALLATION IN 5 SIMPLE STEPS

A - Excavation

The trench excavated shall be 300 mm wider on all sides of the manhole and 150 mm deeper than the manhole invert depth.

2. The excavated base layer should be well compacted (95%) & PCC of 150mm height should be laid on it.
3. Place the manhole on the PCC and fill the gaps below base with PCC.
4. Check the levelling to ensure manhole is horizontally aligned.



B - Connecting Inlet

To connect inlet pipe(s), drill the hole of appropriate diameter with Astral cup saw on pre-marked inlet positions, insert inlet rubber seal, push the plain (spigot) end of PVC pipe into the seal for a watertight connection. Apply Astral Pipes' lubricant for smooth insertion. There is no need for any glue, silicon. For connecting DWC pipe, first insert rubber seal into the inlet hole, then insert one end of DWC connector into inlet hole and push the DWC pipe into the other end of connector for a watertight connection.

2. Astral seals provide watertight connection and allow for 5° movement in all directions.
3. If due to site constraint you cannot connect the inlet at the pre-marked location then you may connect the inlet anywhere on the body of the chamber however direction of the inlet/outlet in benching should be taken into consideration for proper flow.



C - Connecting outlet

Outlet connection of manhole is spigot type. Slip socket end of PVC ringfit pipe on outlet connection of manhole. Apply lubricant for smooth insertion. If required smaller unnecessary spigot may be cut off at right angle with a saw.

For connecting DWC pipe, slip on one end of DWC connector on manhole outlet & insert DWC pipe into the other end of connector.



D - Assembly, backfilling & compaction

1. Check levelling of chamber and ensure horizontal alignment matching with connecting pipes.
2. Back fill around the manhole in layers of 300 mm and compact to 95% with a mechanical vibrating stamper of 50 kgs.
3. Place the element seal on top of the base & install the raiser on it.
4. Place the element seal on top of the raiser & install the upper unit on it.
5. Continue to fill-in and compact in layers of 300 mm up to ground with margin of PCC, RCC and cover height.
6. For greater stability and to increase the load bearing capacity, use gravel or sand for back filling as it has the properties like high permeability and it absorbs the lateral thrust.

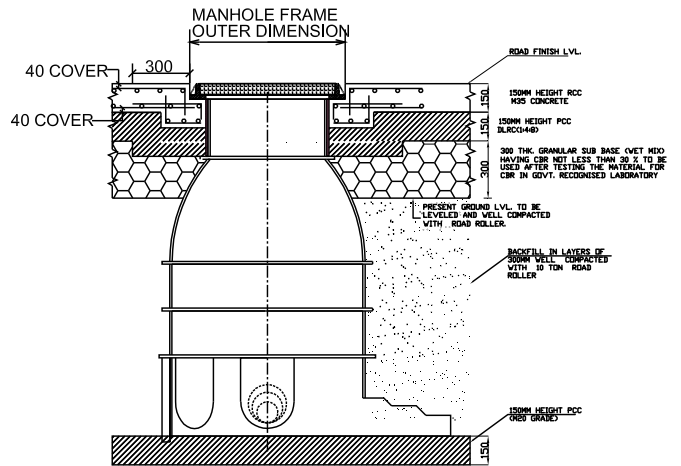


E - Adjust Height and Install Cover

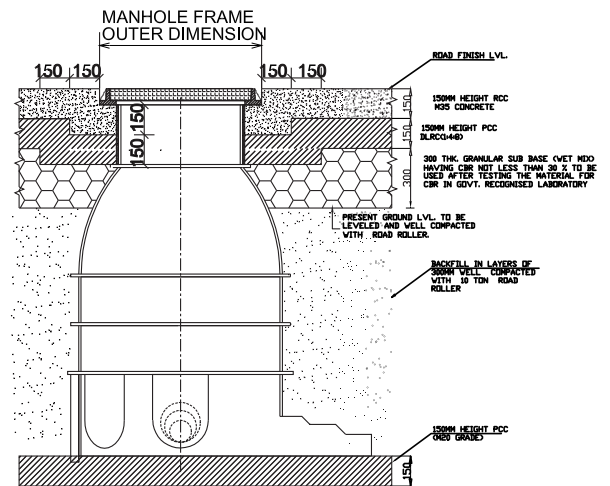
1. The height of the chamber can be adjusted on site by cutting the upper edge of the chamber PE Cover for Ø1000 is not available.
2. Astral PE covers can be used for installation in the garden or non -traffic areas.
3. For installation in traffic areas, a concrete load bearing ring of 150mm PCC & 150mm RCC is required around

the neck. Direct contact of PCC & RCC to chamber neck should be avoided. On this ring of RCC, appropriate class B/C/D/E cover with frame should be installed.

4. Traffic load should not be transferred to manhole. Traffic load should be absorbed by frame & cover of appropriate class installed above manhole within the road. We recommend providing 150mm height PCC & RCC around neck to strengthen the base of frame. Refer manhole installation details below for ready reference.
5. Finish of with asphalt/concrete/pavers top layer, around the cover.



SECTION OF MANHOLE SECTION X-X



SECTION OF MANHOLE SECTION X-X

ASTRAL DRAIN HULK

INSPECTION CHAMBER & MANHOLE INVERT DEPTH

Inspection Chamber										
Size Dia (mm)	Inlets	Material	Item	Type	Invert Depth (mm)	Riser Height (mm)	Inlet (mm)	Out Let (mm)	Cover Dia (mm)	Person Entry
315	1,2,3,5	PP	Inspection Chamber	Modular	240 - 650	159	110	110	315	No
355	1,2,3	PP	Inspection Chamber	Modular	310 - 710	159	160	160	315	No
450	5	PP	Inspection Chamber	Modular	405 - 1065	214	110 (2)-160 (3)	160	450	No
Single piece Chamber										
Size Dia (mm)	Inlets	Material	Item	Type	Invert Depth (mm)	Available Height (mm)	In let (mm)	Out Let (mm)	Cover Dia (mm)	Person Entry
500	5	PE	Inspection Chamber	Single Piece	500-1000	500, 750, 1000	110-160	110-160	500	No
600	5	PE	Inspection Chamber	Single Piece	500-1250	500 750 1000 1250	110-160	110-160	600	No
600	3	PE	Inspection Chamber	Single Piece	500-1950	500 750 1000 1250 1450 1950	160-200-250	160-200-250	600	No
Single Piece Manhole										
800	3	PE	Manhole	Single Piece	1000-1750	1250 1500 1750	160-200-250	160-200-250	600	Yes
800	5	PE	Manhole	Single Piece	1000-1500	1000 1250 1500	110-160	110-160	600	Yes
1000	3	PE	Manhole	Single Piece	1250-1500	1250 1500	200-250-315	200-250-315	600	Yes
1000	5	PE	Manhole	Single Piece	1250-1750	1250 1500 1750	110-160-200	110-160-200	600	Yes
Moduler Manhole										
Size Dia (mm)	Inlets	Material	Item	Type	Invert Depth (mm)	Available Height (mm)	In let (mm)	Out Let (mm)	Cover Dia (mm)	Person Entry
1000	3	PE	Manhole	Base Unit	1250-6000	650	200-250-315	200-250-315	600	Yes
1000	5	PE	Manhole	Base Unit	1250-6000	650	110-160-200	110-160-200	600	Yes
1000	N.A	PE	Manhole	Raiser Unit	N.A	500 750 1000	N.A	N.A	N.A	Yes
1000	N.A	PE	Manhole	Upper Unit	N.A	1100 1350 1600	N.A	N.A	N.A	Yes
Flat Base Chamber										
Size Dia (mm)	Inlets	Material	Item	Type	Invert Depth (mm)	Available Height (mm)	In let (mm)	Out Let (mm)	Cover Dia (mm)	Person Entry
500	N.A	PE	Inspection Chamber	Single Piece	N.A	450 700	N.A	N.A	500	NO
600	N.A	PE	Inspection Chamber	Single Piece	N.A	450 700 950	N.A	N.A	600	NO
1000	N.A	PE	Inspection Chamber	Single Piece	N.A	500 750 1000 1150 1400 1650	N.A	N.A	1000	Yes
GULLY TRAP - 110 mm	PE	N.A	SINGLE PIECE	N.A	405	160 x 160	110	N.A	N.A	N.A
LID/COVER - 500 mm	PE	N.A	N.A	N.A	95	N.A	N.A	N.A	N.A	N.A

Invert Depth = base Unit+ Riser Unit + Upper Unit

* N.A. - Not Applicable

RAIN GUT PROJECT



ASTRAL MANHOLE & INSPECTION CHAMBERS



**SINGLE PIECE
INSPECTION
CHAMBER**

WITH 3 INLETS/OUTLETS

Size (D x H)cm	Size (D x H)mm	Product Code	Std. Pkg. (Nos.)
60.0 x 50.0	600 x 500	3BL060252016050	01
60.0 x 75.0	600 x 750	3BL060252016075	01
60.0 x 100.0	600 x 1000	3BL060252016100	01
60.0 x 125.0	600 x 1250	3BL060252016125	01
60.0 x 145.0	600 x 1450	3BL0602520161450	01
60.0 x 170.0	600 x 1700	3BL060252016170	01
60.0 x 195.0	600 x 1950	3BL060252016195	01



**SINGLE PIECE
INSPECTION
CHAMBER**

WITH 5 INLETS/OUTLETS

Size (D x H)cm	Size (D x H)mm	Product Code	Std. Pkg. (Nos.)
50.0 x 50.0	500 x 500	5BC050001611050	01
50.0 x 75.0	500 x 750	5BC050001611075	01
50.0 x 100.0	500 x 1000	5BC050001611100	01
60.0 x 50.0	600 x 500	5BC060001611050	01
60.0 x 75.0	600 x 750	5BC060001611075	01
60.0 x 100.0	600 x 1000	5BC060001611100	01
60.0 x 125.0	600 x 1250	5BC060001611125	01
60.0 x 145.0	600 x 1450	5BC060001611145	01
60.0 x 170.0	600 x 1700	5BC060001611170	01
60.0 x 195.0	600 x 1950	5BC060001611195	01



**ELEVATION
UNIT (RAISER)**

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
100.0 x 50.0	1000 x 500	E100050FIBSES	01
100.0 x 75.0	1000 x 750	E100075FIBSES	01
100.0 x 100.0	1000 x 1000	E100100FIBSES	01



**SINGLE PIECE
MANHOLE**

WITH 3 INLETS/OUTLETS

Size (D x H)cm	Size (D x H)mm	Product Code	Std. Pkg. (Nos.)
80.0 x 125.0	800 x 1250	3BL080252016125	01
80.0 x 150.0	800 x 1500	3BL080252016150	01
80.0 x 175.0	800 x 1750	3BL080252016175	01
100.0 x 125.0	1000 x 1250	3BL100312520125	01
100.0 x 150.0	1000 x 1500	3BL100312520150	01



**SINGLE PIECE
MANHOLE**

WITH 5 INLETS/OUTLETS

Size (D x H)cm	Size (D x H)mm	Product Code	Std. Pkg. (Nos.)
80.0 x 100.0	800 x 1000	5BC080001611100	01
80.0 x 125.0	800 x 1250	5BC080001611125	01
80.0 x 150.0	800 x 1500	5BC080001611150	01
100.0 x 125.0	1000 x 1250	5BC100201611125	01
100.0 x 150.0	1000 x 1500	5BC100201611150	01
100.0 x 175.0	1000 x 1750	5BC100201611175	01



**BASE WITH
5 INLETS**

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
100.0 x 65.0	1000 x 650	5BC100201611065	01



**BASE WITH
3 INLETS**

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
100.0 x 65.0	1000 x 650	3BL100312520065	01

Note: SOC - SOCKET

ASTRAL MANHOLE & INSPECTION CHAMBERS



UPPER UNIT

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
100.0 x 110.0	1000 x 1100	U100060110FIBSES	01
100.0 x 135.0	1000 x 1350	U100060135FIBSES	01
100.0 x 160.0	1000 x 1600	U100060160FIBSES	01



RUBBER TRANSITION COUPLING

Size (D) mm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
110x100	110x100	TRCR-126111120	01
160x135	160x135	TRCR-177155160#	01
160x150	160x150	TRCR-191155185#	01
200x170	200x170	TRCR-216194220#	01



FLAT BASE CHAMBER

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
50.0 x 45.0	500 x 450	FB050045	01
50.0 x 70.0	500 x 700	FB050070	01
60.0 x 45.0	600 x 450	FB060045	01
60.0 x 70.0	600 x 700	FB060070	01
60.0 x 95.0	600 x 950	FB060095	01
100.0 x 50.0	1000 x 500	FB0100050FIBSES	01
100.0 x 75.0	1000 x 750	FB0100075FIBSES	01
100.0 x 100.0	1000 x 1000	FB0100100FIBSES	01
100.0 x 115.0	1000 x 1150	FB0100060115	01
100.0 x 140.0	1000 x 1400	FB0100060140	01
100.0 x 165.0	1000 x 1650	FB0100060165	01



GULLY TRAP

Size (D X H) cm	Size (D X H) mm	Product Code	Std. Pkg. (Nos.)
11.0 x 40.5	110 x 405	GTZ110GT	01



LID

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
50.0	500	LID050	01



ELEMENT SEAL

Size D (cm)	Size D (mm)	Product Code	Std. Pkg. (Nos.)
100.0	1000	M99020002	01



DWC X PVC CONNECTOR
(SPGXDWC)
(FOR MANHOLE INLET)

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
11.0 x 10.0	110 x 100	M1420014409	28
16.0 x 15.0	160 x 150	M1420014412	12



**DWC X PVC
CONNECTOR**
(GSSXDWC)
(FOR MANHOLE OUTLET)

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
11.0x10.0	110x100	F183113110	01
16.0x15.0	160x150	F183176160	01
20.0x20.0	200x200	F183228200	01
25.0x25.0	250x250	F183291250	01
31.5x30.0	315x300	F183344315	01



**DWC X PVC
CONNECTOR**
(SPGXDW)
(FOR MANHOLE INLET)

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
20.0x20.0	200x200	F182228200	01
25.0x25.0	250x250	F182291250	01
31.5x30.0	315x300	F182344315	01



**DWC X PVC
CONNECTOR**
(PSSXDWC)
(TO JOIN PVC WITH DWC)

Size (D x H) cm	Size (D x H) mm	Product Code	Std. Pkg. (Nos.)
11.0x10.0	110x100	F184113110	01
16.0x15.0	160x150	F184176160	01
20.0x20.0	200x200	F184228200	01
25.0x25.0	250x250	F184291250	01
31.5x30.0	315x300	F184344315	01



**CLIP FOR FIXING
MANHOLE STEPS**

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
-	-	M99020001#	01



**FRP MANHOLE
STEP**

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
-	-	M99020005#	01



**TRIZ FOR
MANHOLE STEPS
MOUNTING**

Size D (cm)	Size D (mm)	Product Code	Std. Pkg. (Nos.)
80.0	800	M99020007#	01
100.0	1000	M99020006#	01



**CUP SAW
ADAPTOR**

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
-	-	CSA	01

ASTRAL INSPECTION CHAMBERS' COMPONENTS



CUP SAW
BLADE

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
11.0	110	CS-110	01
16.0	160	CS-160	01
20.0	200	CS-200	01
25.0	250	CS-250	01
31.5	315	CS-315	01



CHAMBER BODY
WITHOUT
BLANKING PLUG

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005418	01
45.0	450	M142005420	01



INLET SEAL

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
6.3	63	IS-63	01
7.5	75	IS-75	01
9.0	90	IS-90	01
11.0	110	IS-110	01
16.0	160	IS-160	01
20.0	200	IS-200	01
25.0	250	IS-250	01
31.5	315	IS-315	01



CHAMBER
LH TEE
JUNCTION
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420012118	01
35.5 x 16.0	355 x 160	M1420012191	01



CHAMBER
RH TEE
JUNCTION
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420012018	01
35.5 x 16.0	355 x 160	M1420012091	01



CHAMBER BODY
WITH BLANKING
PLUG

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005518	01
45.0	450	M142005520	01



CHAMBER
LH 90°BEND
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420011918	01
35.5 x 16.0	355 x 160	M1420011991	01

Shortly introducing



CHAMBER
RH 90° BEND
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420011818	01
35.5 x 16.0	355 x 160	M1420011891	01



CHAMBER
FRAME

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005218	01
35.5	355	M142005291#	01



CHAMBER
STRAIGHT
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420011718	01
35.5 x 16.0	355 x 160	M1420011791	01



CHAMBER
COVER

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005318	01



CHAMBER
CROSS TEE
INLET JUNCTION
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420012318	01
35.5 x 16.0	355 x 160	M1420012391	01



CHAMBER
COVER

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
45.0	450	M142005320	01



CHAMBER
TWO 90°
INLET JUNCTION
BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420012218	01
35.5 x 16.0	355 x 160	M1420012291	01



CHAMBER BASE
90° BEND
(SAME INVERT)

Size (D) cm	Size (D) mm	Product Code	Std. Pkg. (Nos.)
31.5 x 11.0	315 x 110	M1420014318#	01
35.5 x 16.0	355 x 160	M1420014391#	01

Shortly Introducing

ASTRAL INSPECTION CHAMBERS' COMPONENTS



CHAMBER
FRAME

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
45.0	450	M142005220	01



CHAMBER RISER
WITHOUT RING

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
45.0	450	M142005120	01



CHAMBER
FRAME
WITH COVER

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005718	01
35.5	355	M142005791#	01



CHAMBER RISER
WITH RUBBER
RING

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
45.0	450	M142005820	01



CHAMBER
FRAME
WITH COVER

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
45.0	450	M142005720	01



REDUCER
RISER

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
35.5 x 31.5	355 x 315	M1420012492	01



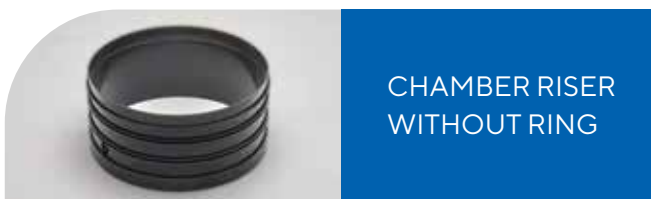
BLANKING
PLUG

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142005909	90
16.0	160	M142005912	38



CHANNEL
DRAIN (COVER)

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142004709	01



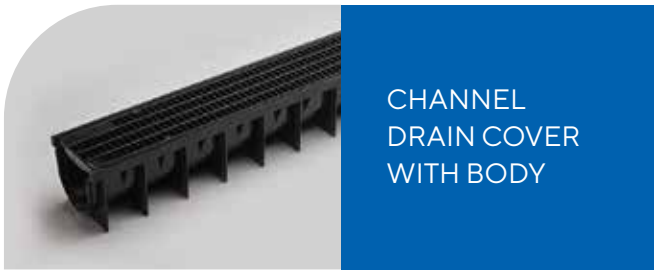
CHAMBER RISER
WITHOUT RING

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
31.5	315	M142005118	04



CHANNEL
DRAIN (BODY)

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142004609	01



CHANNEL
DRAIN COVER
WITH BODY

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142006209	01



CHANNEL
DRAIN COVER
TEE

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142004809	24



PIPE JOINT
LUBRICANT

Qty. (gm)	Product Code	Std. Pkg. (Nos.)
100	T005201030	100
250	T005201035	40
500	T005201025	20



PTFE TAPE
(12 MM WIDTH)

Size (Mtr.)	Product Code	Std. Pkg. (Nos.)
5	M003302004	01
8	M003302007	01
8	M003302017	01



CHANNEL
BLANKING
PLUG (LEFT)

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142004909	24



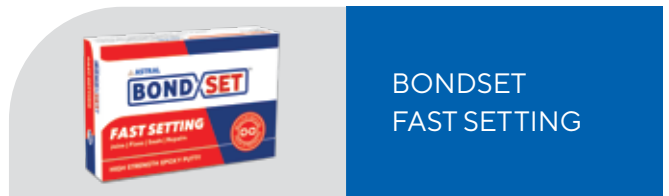
CHANNEL
BLANKING
PLUG (RIGHT)

Size (cm)	Size (mm)	Product Code	Std. Pkg. (Nos.)
11.0	110	M142005009	12



RESCUE
TAPE

Size (Ft.)	Product Code	Std. Pkg. (Nos.)
5	M005601010	120
5	M005601015	120
5	M005601005	120
10	M005601025	120
10	M005601030	120
10	M005601020	120
15	M005601040	120
15	M005601045	120
15	M005601035	120



BONDSET
FAST SETTING

Qty. (gm)	Product Code	Std. Pkg. (Nos.)
50	M000702051	01
100	M000702050	01

COMPARISON:

Sr. no	Characteristic	PE and PP manholes	Concrete and brick manholes
1	Corrosion & Chemical resistance	Excellent	Good
2	Lightweight	Yes	No
3	Smooth interior surfaces	Yes, PE & PP are chemical resistant and erosion resistance so after prolonged service life surface finish remains smooth.	No, Due to poor chemical resistance, internal surface erosion is high, losing surface finish and also reduced hydraulic properties.
4	Durability	Never corrode hence meant for long life performance	Performance deteriorates due to tendency to corrode
5	Overall Cost	Moderate	High
6	Maintenance	Minimum due to no blockages and choke ups, due to erosion proof.	More due to possibility of blockages and choke ups
7	Installation	Easy & Fast, no waiting time after installation, 100 % Leak Proof joints.	Slow and time taking process, requires joints settle time, and there is no assurance of leakage proof joints.
8	Service Life	More than 50 years	After approx. 5 years Based on soil and environment condition erosion of construction wall starts.
9	Flexibility	Great as moulded and fabricated fittings of various sizes & types	Limited range of fitments
10	Ladder construction	Inbuilt with non-corrosive and higher chemical resistance material	Specially to be constructed, from mostly MS, with poor chemical resistance and corrosion resistance.
11	Strength	Long term stiffness and strength	More as tends to corrode on long term
12	Water tightness	100% Water tight system	Leakage possibility is more due to improper sealing based on manpower skill.
13	Hygienic	Yes	Not due to possibility of blockages
14	Safe	Yes	Not due to choke ups
15	Excavation cost	Minimum as easy and quick installation	More compared to complex work and slower installation
16	Hydraulic properties	Perfect as no blockages and choke ups, inbuilt slope is there, throughout service life.	Reduced over period of time, due to erosion
17	Lower Gradient possibility	Yes	Not possible

Traditional concrete or brick manholes often suffer from issues such as corrosion, leakage, and structural deterioration over time. These problems lead to frequent clogging and reduced hydraulic properties of manhole and necessitate frequent and costly repairs, leading to traffic disruptions and increased operational expenses. In contrast, PE and PP manholes offer a remarkable improvement in several aspects. Their corrosion-resistant properties ensure longevity, reducing the need for frequent maintenance. Additionally, their lightweight design facilitates

easier installation and transportation, minimizing construction time and costs. Furthermore, the smooth interior surfaces of PE and PP manholes deter debris build-up and blockages, resulting in improved operational efficiency. Altogether, the transition from conventional manholes to PE and PP manholes represents a significant advancement in infrastructure management, reducing maintenance burdens and enhancing overall performance.





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Report for the 6th time*



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Please get in touch with us between 10 AM to 6 PM
between Monday to Friday and the last Saturday of the month.
We will remain closed on Public Holidays.

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